REMARKS

The Examiner objects to claim 1 because of an informality. By the accompanying amendment, the informality has been eliminated.

The Examiner rejects claims 1 and 3-27 under 35 U.S.C. §112, second paragraph, as being indefinite. By the accompanying amendment, the language objected to has been deleted from the claims without prejudice or disclaimer.

The Examiner rejects claims 1, 3-6, 8-16, 18-20 and 22-26 under 35 U.S.C. §103(a) as being unpatentable over Zucker in view of Abbe et al., U.S. Patent No. 3,159,507 and Kawai et al., U.S. Patent No. 3,210,218; claim 7 as being unpatentable over Zucker in view of Abbe et al. and Kawai et al., and further in view of Farahmandi et al., claim 17 as being unpatentable over Zucker in view of Abbe et al. and Kawai et al., and further in view of Kawai JP 55-146872; claim 21 as being unpatentable over Zucker in view of Abbe et al. and Kawai et al., and further in view of Bohnstedt; and claim 27 as being unpatentable over Zucker in view of Abbe et al. and Kawai et al., and further in view of Nann et al., U.S. Patent No. 4,657,799.

By the accompanying amendment, claim 1 has been amended to recite microporous film instead of microporous sheet; to recite that the film is made of a thermoplastic polyolefin; to recite that the fleece material has a thickness of 0.25 mm or less and comprises polyester fibers or a mixture of glass fibers and polyester fibers; and to recite that the planar fleece material is

bonded to at least some of the protrusions of the film by the welded joints. The basis for the amendment "polyolefin" is original claim 8. The requirement that the "fleece material has a thickness of 0.25 mm or less" is based on original claim 18. The requirement that the fleece material "comprises polyester fibers or a mixture of glass fibers and polyester fibers" is based, *inter alia*, on original claims 15 and 16. The requirement that "the planar fleece material is bonded to at least some of the protrusions of the film by the welded joints" is based on original claim 2. For reasons of consistency, the term "film" as in original claim 2 has been used in amended claim 1. Similar amendments have been made to claim 19 and claims 3, 4, 13, 21, and 23 to 26 have been amended for consistency with claims 1 and 19.

Claims 2, 8 and 14 have been canceled, and claim 9 has been made dependent on claim 1.

The material according to the invention is advantageously rather thin. Such a composite material is specifically available from the polyolefin microporous film and the polyester fibers in the fleece material. With some other materials of the microporous film and/or fleece material, a formation of a composite by ultrasonic by welding would not be possible.

With regard to Zucker, a fleece material thickness of 0.25 mm or less (in accordance with the accompanying amendments) may seem to partly fall within the range of 0.2 to 3.6 mm at page 15, second paragraph of Zucker, but Zucker prefers 0.3 to 1.0 mm. With regard to the limitation of the fleece material (polyester

fibers or a mixture of glass fibers and polyester fibers), it is noted that the preferred material of Zucker is glass fibers, even though a mixture of glass fibers and polymeric fibers may seem to be generally taught at page 12, second paragraph of Zucker. Examples for polymeric fibers are polyesters, see page 13, line 7. Moreover, ultrasonic sealing may be disclosed at page 16 of Zucker, second paragraph, line 4. However, with regard to the amendments in combination, it must be noted that the examples of Zucker use a fibers layer made up of just glass fibers, having a thickness of 0.86 mm, and the lamination was achieved by a stripe of adhesive. As such, Zucker teaches away from the presently claimed invention.

With regard to Abbe, it teaches a separator made entirely of glass fibers. Abbe at column 2, lines 30 to 41, is furthermore specific as being of a single type of material. Moreover, Abbe does not appear to teach a specific thickness of material.

Kawai‘218 relates to a storage battery separator, which is principally made of diatomaceous earth. Polyvinyl chloride is used as binding agents for the diatomaceous earth, see column 2, lines 2 to 4 of Kawai‘218.

Farahmandi does not relate to a separator for a lead-acid accumulator, but to a multi-electrode double layer capacitor. In fact, Farahmandi in paragraph [0003] distinguishes between capacitors and rechargeable batteries. The Office Action refers to Farahmandi at page 13, second but last paragraph as allegedly teaching that ultrasonic welding is a suitable bonding technique.

However, as can be gathered from paragraph [0235] referred to by the Examiner, see page 19, left-hand column, and Figure 28A of Farahmandi, the bonding discussed there is one between an aluminum foil and a carbon cloth, which are not the materials in accordance with the presently amended claims.

Kawai‘872 has been referred to in the Office Action at page 14, item 8. According to the abstract of Kawai ‘872, a separator consists of 50 to 80 wt% glass fibers and 50 to 50 wt% polypropylene and/or polyethylene fibers. There does not seem to be disclosure of a separator material consisting of at least two layers, and there is moreover no disclosure of polyester fibers which would be mandatory in accordance with the presently amended claims.

Bohnstedt relates to separators comprising a microporous sheet provided with a plurality of studs having the form of truncated cones and continuous vertical ribs in the center area of the separator sheet. An additional fleece material layer is not disclosed in Bohnstedt.

Nann (referred to in the application as filed (as German language family member DE 33 35 547 C1, see in the English translation at page 4, second paragraph)) relates to a thin sheet material for the production of separator pockets. Interestingly, Nann teach polyester web layers, and at column 1, lines 56 to 59, teaches that bonding of a sheet material with a polyester web layer is only conditionally possible and is less suitable for automatic mass production. To solve this issue, the web layer of

Nann is applied to the sheet material in such a way that the area of the web layer is smaller than the inside area of the sheet material defined by the bonding seams provided in the edge zones of the sheet material. Hence, Nann teaches away from the ultrasonic bonding as presently claimed.

New claim 28 has been added to further define the invention.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,

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